Sept. 11, 1923. 1,467,830

A. L. BOGGS

KNOCKDOWN STOOL

Filed Sept. 29, 1922 2 Sheets-Sheet 1

FIG. 1.

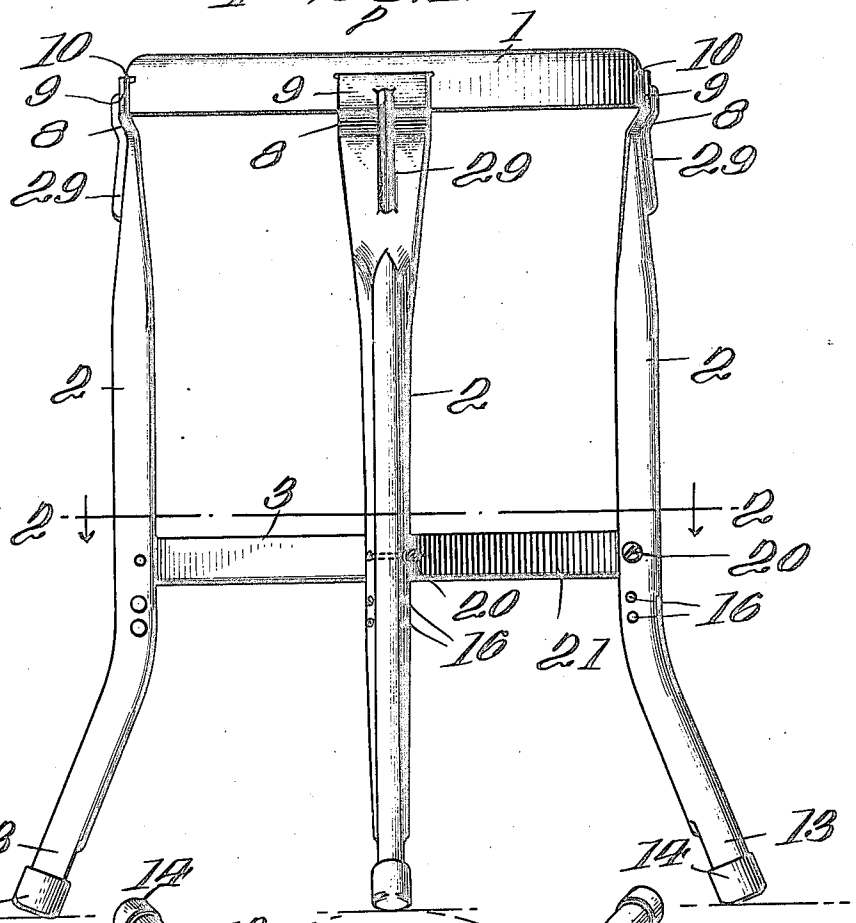
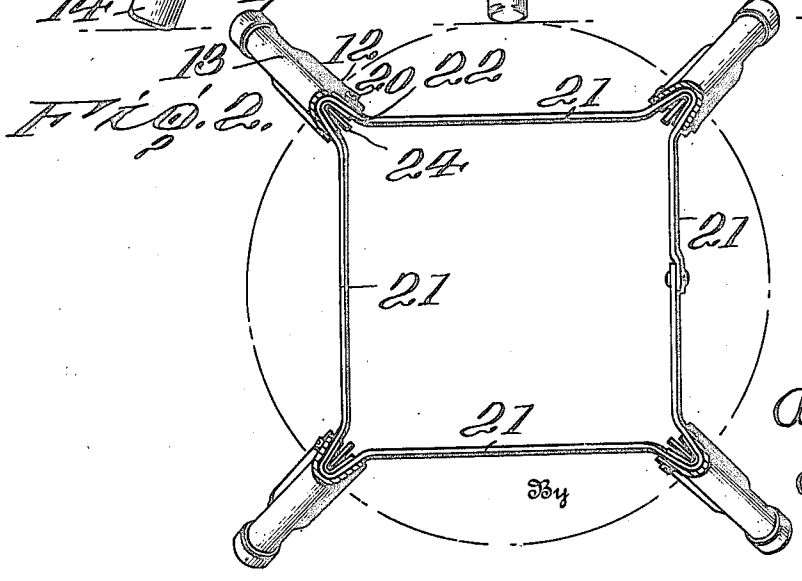


FIG. 2.



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Filed Sept. 29, 1922 2 Sheets-Sheet 2

Fig. 3.

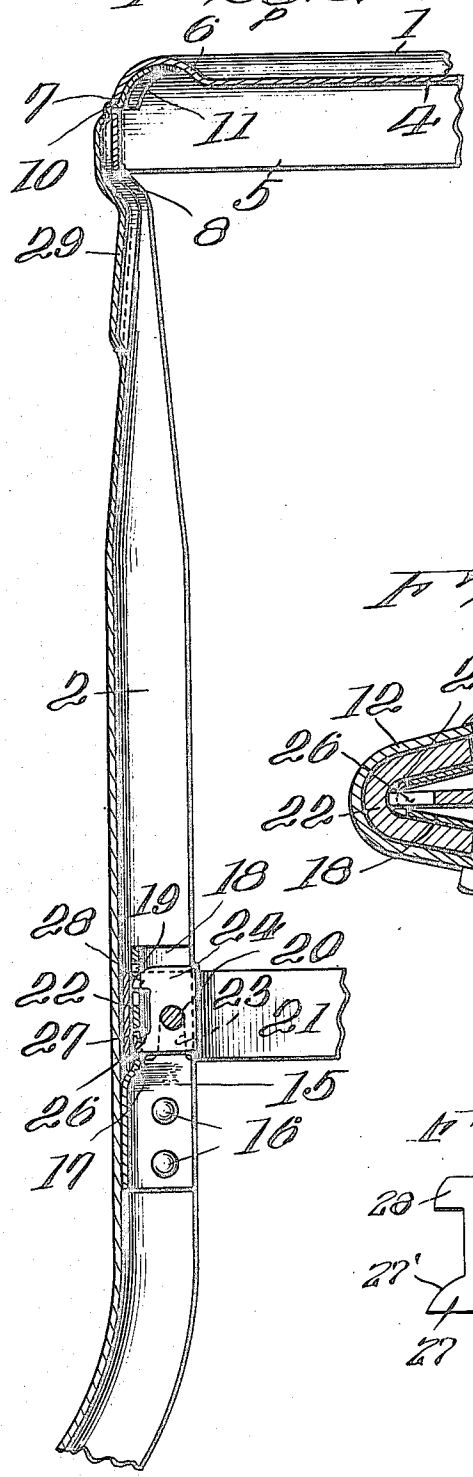


Fig. 4.

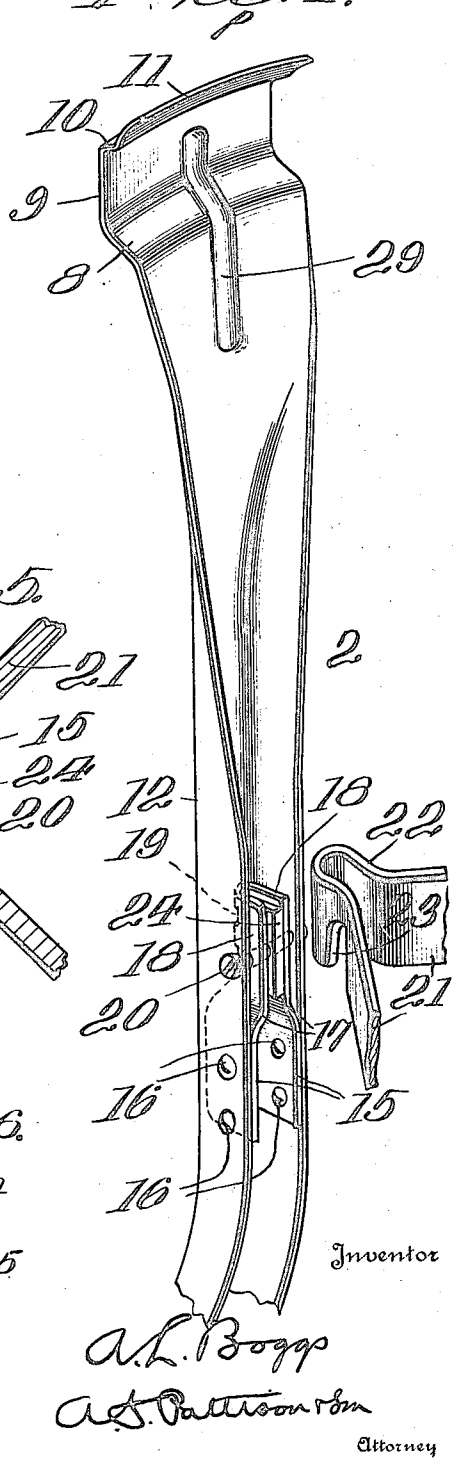
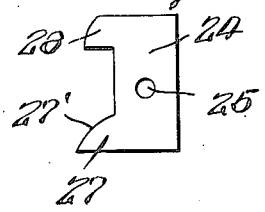


Fig. 5.

Fig. 6.



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UNITED STATES PATENT OFFICE.

ATWOOD L. BOGGS, OF STOUGHTON, MASSACHUSETTS, ASSIGNOR TO PERFECTION COOLER COMPANY, OF STOUGHTON, MASSACHUSETTS.

KNOCKDOWN STOOL.

Application filed September 29, 1922. Serial No. 591,363.

To all whom it may concern:

Be it known that ATWOOD L. BOGGS, citizen of the United States, residing at Stoughton, in the county of Norfolk and State of Massachusetts, has invented certain new and useful Improvements in Knockdown Stools, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to improvements in knock-down stools and the primary object is to provide a stool of this character which can readily be taken apart for shipment or storage.

Another object of the invention is to provide a knock-down stool which can quickly be assembled and disassembled without the necessity of removing screws, nuts, bolts, clamps or the like.

A further object of the present improvement is to provide a knock-down stool which is sturdy in its assembled form, and at the same time forming an article of furniture that is pleasing to the eye.

A further object of the invention is the provision of a knock-down stool for use in stores and other places, and when assembled its parts are locked in their assembled positions.

To the above ends the invention consists in the features hereinafter described and which will be readily understood from the accompanying drawings in which:

Figure 1 is a side elevation of my improved stool, the same being shown in assembled form.

Fig. 2 is a horizontal section on the line 2—2 of Fig. 1.

Fig. 3 is an enlarged partial section showing the locking of the legs to the top and to the angular brace.

Fig. 4 is a detached perspective view of one of the legs detached showing a part of the brace also detached.

Fig. 5 is a horizontal sectional view through the brace to the legs showing them in assembled positions.

Fig. 6 is a detached view of the brace locking member.

My present improvement comprises a top 1, legs 2 and a brace 3. The top and the legs are formed from sheet metal, and the brace from a strip of metal. Preferably in my improved stool I use four legs, though it may be comprised of three. An elongated stool might use even more than four legs.

The top 1 is formed from sheet metal as stated, having a top 4 with a depending edge 5. The top and its edge are preferably united by a bead or curve portion 6. In the edges of the top are cut slots 7 of a number corresponding to the number of legs employed and of a length sufficient to permit the top ends of the legs to pass through them. These legs are formed from sheet metal having their upper ends bent outward as at 8 then upward as at 9 and having their extremities provided with inwardly bent portions 10 which terminate in an upwardly and inwardly inclined part 11. The lower portion of the legs are doubled into U shape as shown at 12 and the double portion continues to near their lower ends at which point they are bent to a rounded portion 13 which is provided with caps 14 that rest on the floor.

Intermediate the legs I provide means for receiving and for locking the removable angular base 3. This is locked in the U shaped part of the leg and comprises a plate having its lower end 15 U-shaped to correspond to the internal U-shape 12 of the leg. The plate is placed within the leg and secured by suitable rivets 16. This plate has its upper end compressed as shown at 17 into two upwardly extending parts 18. I am enabled to form the plate in the shape here shown by cutting it longitudinally at 19 so that it may be collapsed as shown. A screw or rivet 20 passes through the legs 2 and the parts 18. It will be observed that the compressing of the upper end of the plate 15 forms a space between the inner surface of the walls and the U-shaped portion of the legs.

An angular brace 21 unites the legs and holds them firmly in position. This brace has at its corners outwardly bent portions 22 which fit in the space between the legs and the arms 18. The under side of the U-shape bend 22 of the brace is provided with a notch 23 which receives the bolt 20 when the brace is in position on the leg. It will be noted that the U-shaped bend 22 embraces the arms 18 when it is in position.

For the purpose of forming a lock for locking the brace in its position I provide a locking plate 24. This locking plate passes

between the arms 18 and has an opening 25 through which the bolt or screw 20 also passes, and the locking plate projects inward slightly beyond the outer wall of the arms 18 being engaged by the end 22 of the brace 3. To form the locking plate to extend beyond the outer walls of the arms 18 these arms are provided with cut out portions through which the locking projections 27 and 28 pass. When the U-shaped part 22 of the brace is forced in position it engages the upper projection 28 and as it is forced downward causes the lower projection 27 to be forced outward against the inner wall of the U-shaped part of the brace 3. Attention is called to the fact that the lower projection 27 is somewhat longer than the upper projection so that as the brace is forced in position the locking plate 24 is rocked on the bolt 20 causing the brace to be wedged in position. The lower locking member 27 has an incline 27′ whereby it forms an end which will bite into the brace. It will be understood that the brace when forced in position is locked and can only be removed by a hammer.

For the purpose of strengthening the upper parts of the legs I provide them with a longitudinally extending corrugation 29 which extends through the bent portion of the leg and down into the leg proper. This strengthens the leg very much.

I do not limit myself to the precise construction herein shown and described for it may be modified within the scope of the appended claims without departing from the scope of the invention.

What I desire to secure and claim by Letters Patent is:

1. A knock-down article comprising a seat having leg receiving openings, legs having their upper ends bent to lock them in place when they are passed through the seat openings, the lower portion of the legs bent into a U-shape, a U-shaped plate secured in the U-shape bend of the legs, said plate having upwardly extending arms, and a brace having U-shaped bends adapted to embrace the said arms.

2. A knock-down article comprising a seat having leg receiving openings, legs having U-shape portions, a plate secured in the U-shape portion, the plate being collapsed and forming upwardly extending arms, and a brace having projecting U-shape bends adapted to embrace the said arms.

3. A brace connection for the legs of a knock-down article, the legs having a U-shape bend, upwardly extending arms within the U-shape bend and a rocking locking plate, a brace having U-shape bends embracing the arms and engaged by the locking plate.

4. A brace connection for the legs of a knock-down article, the legs having U-shape bent portions, a rod passing through the U-shape portion and carrying a rocking and locking plate, a brace member provided with a U-shape bend adapted to embrace the plate and lock itself in the leg.

5. A brace connection for the legs of a knock-down article comprising a lock for a U-shape bend, a locking plate pivoted in the U-shape bend, a brace having a U-shape bend adapted to embrace the locking plate, the locking plate having its inner ends shaped to engage the wall of the U-shape bend when the brace is forced into position and lock it.

6. A knock-down article comprising a seat portion having leg receiving openings, a leg having its upper ends passing through the said openings, the lower portion of the leg formed into a U-shape in cross section, upwardly extending parallel arms within the U-shape portion of the leg, a locking plate between the parallel arms, a bolt passing through the arms and the plate, and a brace having a U-shape bend adapted to embrace the arms and the locking plate and force the plate to locking position.

7. A knock-down article comprising a seat having leg receiving openings, the legs having their upper ends passing through the said openings, the lower portion of the legs bent into a U-shape in cross-section, upwardly extending parallel arms in the said U-shape portion, a locking plate between the said arms, a bolt passing through the arms and said locking plate, a brace having U-shape bends provided with upwardly extending openings to receive the said bolt, whereby when the brace is forced in position the locking plate acts to hold it.

8. A knock-down article comprising a seat portion having leg receiving openings, legs having their upper ends passing through the said openings, the lower portion of the legs bent into a U-shape, a locking plate within the U-shape portion, a pivotal bolt for the locking plate, a brace having U-shape portions adapted to enter the U-shape portion of the legs and embrace the locking plate and cause it to lock the brace in position.

ATWOOD L. BOGGS.